



HOME OFFICE: 4301 DOMINION BLVD.  
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## MATERIAL SAFETY DATA SHEET

### SECTION I

TRADE NAME <b>CHEMTREAT CL-1446</b>	EMERGENCY TELEPHONE NO. <b>(800) 424-9300</b> <small>ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT INVOLVING CHEMICALS</small>
CHEMICAL NAME AND SYNONYMS  Organic and Inorganic Scale and Corrosion Inhibitors	

### SECTION II HAZARDOUS INGREDIENTS

PRINCIPAL HAZARDOUS COMPONENT(S)	CAS NO.	%	ORAL LD <sub>50</sub>	DERMAL LD <sub>50</sub>	TLV (Units)
Potassium hydroxide	1310-58-3	<5	365 mg/kg (Rats)	>2 g/kg (Rabbits)	2 mg/m <sup>3</sup> ACGIH/OSHA Ceiling
Tolyltriazole, sodium salt	64665-57-2	>1	640 mg/kg (Female Rats)	>2 g/kg (Rabbits)	NE
2-Butenedioic Acid (Z)-, homopolymer	26099-09-2	>1	15.0 g/kg (Rats)	NIF	NE
Sodium molybdate	7631-95-0	<2	4233 mg/kg (Rats)	NIF	5 mg/m <sup>3</sup> OSHA/ACGIH
2-phosphono-1,2,4-butanetricarboxylic acid aqueous solution	37971-36-1	>1	>6 g/kg (Rats)	NIF	NE

### SECTION III PHYSICAL DATA

BOILING POINT (°F)	≥212	SPECIFIC GRAVITY (H <sub>2</sub> O = 1)	at 20°C	~1.13
VAPOR PRESSURE (mm Hg.) at 20°C	NE	PERCENT VOLATILE BY WEIGHT(%)		78
VAPOR DENSITY (AIR=1)	NE	EVAPORATION RATE ( )		NE
SOLUBILITY IN WATER	Complete	pH at 20°C		13.1
APPEARANCE AND ODOR	Clear, amber liquid, strong aldehyde odor.			

### SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used)	Not flammable	FLAMMABLE LIMITS % by Vol.	LeI	NAP	UeI	NAP
EXTINGUISHING MEDIA	Not Flammable. Use extinguishing media appropriate to the surrounding fire.					
SPECIAL FIRE FIGHTING PROCEDURES	If product is involved in a fire, firefighters should wear full protective clothing including a NIOSH approved self-contained breathing apparatus.					
UNUSUAL FIRE AND EXPLOSION HAZARDS	Keep containers cool with water spray to minimize the potential of decomposition.					



## SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT  
VALUE

OSHA TLV

NE

ACGIH TLV

NE

### EFFECTS OF OVEREXPOSURE

Corrosive to all tissues, eyes, skin and mucous membranes. Mists and vapors can be severely irritating to the respiratory tract. Harmful if swallowed.

### HEALTH EFFECTS

No applicable information was found on the long term health effects of this product.

### PRIMARY ROUTE OF ENTRY

Eyes  
Skin  
Ingestion

### EMERGENCY FIRST AID PROCEDURE

EYES: Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of entire eye surface. Seek medical attention. SKIN: In case of contact immediately wash with plenty of water while removing contaminated clothing. Seek medical advice. Wash and decontaminate clothing before reuse. ORAL: Call a physician - drink large quantities of milk, egg whites, gelatin, or water - never administer anything by mouth to an unconscious person. INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. If breathing is difficult, give oxygen. Call a physician.

## SECTION VI REACTIVITY DATA

STABILITY	STABLE	√	CONDITIONS TO AVOID	None Known
	UNSTABLE			
INCOMPATABILITY (Materials to Avoid)			Oxidizers and excessive heat.	
HAZARDOUS DECOMPOSITION PRODUCTS			Oxides of carbon and of nitrogen.	
HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID	None Known
MAY OCCUR		NO		

## SECTION VII SPILL OR LEAK PROCEDURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Wearing appropriate protection equipment (see Section VIII), contain spill. Using an inert chemical absorbent, collect spilled material and place in a properly labeled container for disposal or reuse. Report spills as required to appropriate authorities.

### WASTE DISPOSAL METHOD

This material may be considered hazardous according to 40 CFR 261.22. Dispose of as unlisted hazardous waste, characteristic of corrosivity, D002. Observe all federal, state, and local regulations when disposing of this product.



## SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION If misting occurs, use NIOSH-MSHA organic vapor/acid gas dual cartridge respirator  
(Specify Type) with dust/mist prefilter.

EYE PROTECTION  
Chemical splash goggles

SKIN PROTECTION  
Rubber gloves, apron, and boots

VENTILATION  
Local exhaust

OTHER PROTECTION  
Eye wash fountain and safety shower.

## SECTION IX SPECIAL PRECAUTIONS

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Wash thoroughly after handling. Remove and wash contaminated clothing promptly. Do not ingest.  
Do not get on skin, eyes, or clothing.

### OTHER PRECAUTIONS

Keep away from heat and oxidizers. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations.  
Store at ambient temperatures.

## SECTION X MISCELLANEOUS DATA

NIF - No Information Found

NA - Not Available

NE - Not Established

D.O.T. Class: Potassium hydroxide solution  
Hazard Class8 UN 1814 PG II Corrosive Label

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Timothy H. Reid / Director of Regulatory Affairs

CL-1446

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PREPARED BY

*Timothy H. Reid*

DATE





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REGULATORY COMPLIANCE	HAZARDOUS INGREDIENTS						
	1	2	3	4	5	6	7
CWA/ 304 Water Quality Criteria	No	No	No	No	No		
CWA/307 Priority Pollutants	No	No	No	No	No		
CWA/311 Hazardous Chemicals	YES	No	No	No	No		
CAA/111 VOC	No	No	No	No	No		
CAA 1990 Amendments	No	No	No	No	No		
RCRA Land Disposal Restrictions	No	No	No	No	No		
CERCLA Hazardous Substances	YES (1)	No	No	No	No		
SARA/302 Extremely Hazardous Substances	No	No	No	No	No		
SARA/313 Toxic Chemicals	No	No	No	No	No		
NTP/IARC/OSHA/ACGIH Carcinogen	No	No	No	No	No		
California Proposition 65	No	No	No	No	No		
MAPA/NJ Hazardous	MA/NJ	No	No	No	No		

SARA SECTION 311/312 CATEGORIES		NFPA RATING		HMIS RATING	
- Acute	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3	0	3	1
- Chronic	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
- Fire	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
- Sudden Release of Pressure	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1			
- Reactive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				